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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/705,365	11/10/2003	Shigeru Nojima	5576-153	4620

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EXAMINER
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NGUYEN, CAM N

ART UNIT	PAPER NUMBER
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1754

DATE MAILED: 01/25/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/705,365

Applicant(s)

NOJIMA ET AL.

Examiner

Cam N. Nguyen

Art Unit

1754

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on October 20, 2005 (an election).
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 8-18 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 8-18 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on originally filed is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
  - 2) ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date originally filed.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## DETAILED ACTION

### **Response to Election/Restriction**

1. Applicant's election without traverse of Group I, claims 8-18, in the reply filed on October 20, 2005 is acknowledged.

### **Response to Amendment**

2. Applicants' amendment and remarks, filed October 20, 2005, has been made of record and entered. Claims 1-7 have been canceled.

Claims 8-18 are currently pending and under consideration.

### **Claim Objections**

3. Claims 8, 12, & 18 are objected to because of the following informalities:
  - A. In claim 8, line 2, "having" is suggested changed to --supporting--.
  - B. In claim 8, line 3, "supported" should be deleted.
  - C. In claim 12, line 2, "supported by the vapor phase method" should be deleted.
  - D. In claim 18, line 2, "pentaoxide" (both occurrence) should be changed to --pentoxide--.

Appropriate correction is required.

### **Claim Rejections - 35 USC § 112 (Second Paragraph)**

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

Art Unit: 1754

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claims 11 & 18 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

It is considered the limitation on "range from 0.1 to 0.9 wt.% based on the total weight of the catalyst" is unclear as to what applicants intend since the claims also recite a range for vanadium pentoxide of "from 0.4 to 5 wt.%".

**Claim Rejections - 35 USC § 102(b)/103**

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 7-17 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Imanari et al., "hereinafter Imanari", (US Pat. 4,466,947).

Imanari discloses a denitration catalyst which comprises a mixture of titanium dioxide ( $\text{TiO}_2$ ) and tungsten oxide ( $\text{WO}_3$ ), as a porous molded article, and vanadium compound ( $\text{V}_2\text{O}_5$ ), as an active compound. The vanadium compound localized in the area of the molded article which extends from its outermost surface to a depth of 500 microns or less, and the content of vanadium compound in said area is 0.1 to 15% by weight. See col. 8, claim 1 & also claims 2-4. Imanari further discloses that the catalyst can be in various shapes including honeycomb shape (see col. 5, ln 29-31). The catalyst can further contain an amount of up to 10% of another metal oxide selected from a group including  $\text{SiO}_2$  (see col. 5, ln 41-44). See also Example 1 of the reference.

With respect to the process limitation on "using a vapor phase method" in claim 7, it is considered the claimed process limitation has no bearing on the patentability of the claimed product because it been held that the patentability of the product and its method of production are separately determined. See In re Thorpe, 227 USPQ 964 (Fed. Cir. 1985); In re Brown, 173 USPQ 688, 688 (CCPA 1977); In re Fessman, 180 USPQ 324, 326 (CCPA 1977). See also *MPEP* 2113. Further, while the catalyst of the reference is not made by the same process, the catalyst made and disclosed is the same as being claimed.

The claimed vanadium pentoxide amounts are met by the teaching of the reference since it falls within the disclosed range (see Imanari above).

With respect to the limitation on "vanadium pentoxide crystallite size" in claim 12, it is inherent and expected that the disclosed catalyst would have the same vanadium pentoxide crystallite size because the disclosed catalyst is the same as being claimed.

**Claim Rejections - 35 USC § 102(b)**

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

9. Claim 18 is rejected under 35 U.S.C. 102(b) as being anticipated by Imanari et al., "hereinafter Imanari", (US Pat. 4,466,947).

Imanari discloses a catalyst as described above.

The claimed vanadium pentoxide amounts are met by the teaching of the reference since it falls within the disclosed range (see Imanari above).

With respect to the limitation on "vanadium pentoxide crystallite size" in the claim, it is inherent and expected that the disclosed catalyst would have the same vanadium pentoxide crystallite size because the disclosed catalyst is the same as being claimed.

There is no patentable distinction seen between the claimed catalyst and that disclosed by Imanari, thus the claims are anticipated by the reference.

**Citations**

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. All references are cited for related art. See PTO-892 Form attached.

**Conclusion**

11. Claims 8-18 are pending. Claims 8-18 are rejected. No claims are allowed.
12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Primary Examiner Cam N Nguyen, whose telephone number is 571-272-1357. The examiner can normally be reached on M, W, R, & F, 9:00 AM - 6:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stanley Silverman, can be reached on 571-272-1358. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Nguyen/cnn *cnn*  
January 23, 2006

*Cam Nguyen*  
CAM N. NGUYEN  
PRIMARY EXAMINER

Art Unit: 1754